

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0104647; AI 38078; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Sarepta
Sarepta Municipal Wastewater Treatment Facility
P.O. Box 338
Sarepta, LA 71071

- II. **PREPARED BY:** Eura DeHart

DATE PREPARED: August 14, 2009

- III. **PERMIT ACTION:** Reissue LPDES permit LA0104647, AI 38078; PER20090001

 LPDES application received: February 18, 2009

 EPA has not retained enforcement authority.

 LPDES permit issued: September 28, 2004
 LPDES permit expires: September 30, 2009

- IV. **FACILITY INFORMATION:**
 - A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Sarepta.
 - B. The permit application does not indicate the receipt of industrial wastewater.
 - C. The facility is located on Denmon Road, off LA Highway 2, ½ mile east of Sarepta, Webster Parish.
 - D. The treatment facility consists of a two-cell oxidation pond. Disinfection is by chlorination.
 - E. Outfall 001

Discharge Location: Latitude 32° 54' 1" North
Longitude 93° 26' 15" West

Description: treated sanitary wastewater

Design Capacity: 0.15 MGD

Type of Flow Measurement which the facility is currently using:
Totalizer / Continuous Recorder

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 2

V. RECEIVING WATERS:

The discharge is into Howell Creek, thence into Bayou Dorcheat in subsegment 100501 of the Red River Basin. This segment is listed not on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 100501 of the Red River Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	Full	N/A	N/A	Full

^{1/}The designated uses and degree of support for Segment 100501 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100501 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 3

For additional information, contact:

Mr. Eura DeHart
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 100501, Bayou Dorcheat – Arkansas State Line to Lake Bistineau (Scenic), is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 100501 was previously listed as impaired for organic enrichment/low DO and mercury, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

- The following TMDL's have been established for subsegment 100501:

- Bayou Dorcheat TMDL for Dissolved Oxygen (Subsegment 100501), March 25, 2008

- Reductions of existing nonpoint source loads and summer permit limits of one point source (Minden Wastewater Treatment Plant) were required for the projection simulations to show the DO criterion of 5 mg/l being maintained in the bayou.

Therefore, no changes in the permit limitations for this permit will be required.

Mercury TMDL for Bayou Dorcheat, Louisiana (Subsegment 100501), March 26, 2008

Atmospheric deposition of mercury was identified as the suspected cause of impairment for the subsegment. The largest sources of mercury load to the subsegment were atmospheric deposition and erosion. This TMDL report indicates that current mercury loadings to the listed subsegment are primarily from regional and global atmospheric sources. Significant reduction in atmospheric deposition within and outside the study area will be necessary. A combination of ongoing and future activities under the Clean Air Act are expected to achieve reductions in atmospheric deposition of mercury.

Point sources of mercury were not numerous in the listed subsegments, and accounted for significantly less than 1% of the mercury loads. Therefore, point source loads were not reduced in these TMDLs.

Therefore, no mercury limitations will be required of this facility.

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 4

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	12.5	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size.
TSS	18.8	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 5

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMIT:

LPDES Permit No. LA0104647: Issued: September 28, 2004
Expires: September 30, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH	6.0	9.0	2/month	Grab
Oil & Grease	---	Report	1/quarter	Grab

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the most recent inspection of the facility was conducted on June 5, 2009. The following was noted:

- The WWTP is a 2-cell oxidation pond with aeration basin and chlorine contact chamber.
- The WWTP is well maintained. All treatment units were in service.
- DMRs revealed chronic permit exceedances for BOD₅.
- Oil & grease is not collected for Outfall 001 as required by the permit.
- A contract lab completes effluent analysis.

B) Compliance and/or Administrative Orders

A Warning Letter (Enforcement Tracking No. WE-L-08-0107) was issued to the facility on January 23, 2008 for areas of concern noted during the April 12, 2007 inspection.

C) DMR Review

A review of the discharge monitoring reports for the period beginning July 2007 through June 2009 has revealed the following excursions:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
Fecal Coliform (monthly avg)	001	July 2007	200	611
Fecal Coliform (weekly avg)	001	July 2007	400	616

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 6

BOD ₅ (monthly avg)	001	August 2007	10 mg/l	11.9 mg/l
BOD ₅ (weekly avg)	001	August 2007	15 mg/l	15.6 mg/l
BOD ₅ (monthly avg)	001	September 2007	10 mg/l	13.0 mg/l
BOD ₅ (weekly avg)	001	September 2007	15 mg/l	17.7 mg/l
Fecal Coliform (weekly avg)	001	October 2007	400	606
BOD ₅ (monthly avg)	001	November 2007	10 mg/l	14.6 mg/l
BOD ₅ (weekly avg)	001	November 2007	15 mg/l	20.1 mg/l
Fecal Coliform (monthly avg)	001	November 2007	200	315.5
Fecal Coliform (weekly avg)	001	November 2007	400	408
BOD ₅ (monthly avg)	001	December 2007	10 mg/l	21.1 mg/l
BOD ₅ (weekly avg)	001	December 2007	15 mg/l	27.8 mg/l
TSS (monthly avg)	001	December 2007	15 mg/l	29.5 mg/l
TSS (weekly avg)	001	December 2007	23 mg/l	39.4 mg/l
Fecal Coliform (monthly avg)	001	December 2007	200	245
BOD ₅ (monthly avg)	001	January 2008	10 mg/l	11.4 mg/l
BOD ₅ (monthly avg)	001	February 2008	10 mg/l	13.9 mg/l
TSS (monthly avg)	001	February 2008	15 mg/l	27.5 mg/l
TSS (weekly avg)	001	February 2008	23 mg/l	30.2 mg/l
Fecal Coliform (monthly avg)	001	February 2008	200	459.2
Fecal Coliform (weekly avg)	001	February 2008	400	635
Fecal Coliform (monthly avg)	001	March 2008	200	780
Fecal Coliform (weekly avg)	001	March 2008	400	3234
BOD ₅ (monthly avg)	001	April 2008	10 mg/l	17.1 mg/l
BOD ₅ (weekly avg)	001	April 2008	15 mg/l	24.1 mg/l
Fecal Coliform (weekly avg)	001	April 2008	400	434
BOD ₅ (monthly avg)	001	May 2008	10 mg/l	15.1 mg/l
BOD ₅ (weekly avg)	001	May 2008	15 mg/l	18.0 mg/l
Fecal Coliform (monthly avg)	001	July 2008	200	215
Fecal Coliform (monthly avg)	001	August 2008	200	320
BOD ₅ (monthly avg)	001	October 2008	10 mg/l	16.4 mg/l
BOD ₅ (weekly avg)	001	October 2008	15 mg/l	22.9 mg/l
Fecal Coliform (monthly avg)	001	October 2008	200	558
Fecal Coliform (weekly avg)	001	October 2008	400	1900
BOD ₅ (monthly avg)	001	November 2008	10 mg/l	13.7 mg/l
BOD ₅ (weekly avg)	001	November 2008	15 mg/l	18.2 mg/l
BOD ₅ (monthly avg)	001	December 2008	10 mg/l	17.6 mg/l
BOD ₅ (weekly avg)	001	December 2008	15 mg/l	18.9 mg/l
BOD ₅ (monthly avg)	001	February 2009	10 mg/l	18.1 mg/l
BOD ₅ (weekly avg)	001	February 2009	15 mg/l	18.4 mg/l
BOD ₅ (loading)	001	April 2009	12.5 lbs/day	40.9 lbs/day

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 7

BOD ₅ (monthly avg)	001	April 2009	10 mg/l	13.5 mg/l
BOD ₅ (weekly avg)	001	April 2009	15 mg/l	15.4 mg/l
BOD ₅ (monthly avg)	001	May 2009	10 mg/l	14.6 mg/l
BOD ₅ (weekly avg)	001	May 2009	15 mg/l	22.1 mg/l

Oil & grease was not reported on a quarterly basis as required by the permit.

The following DMRs were missing from the file: June 2008 and September 2008.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.15 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.15 \text{ MGD} \times 10 \text{ mg/l} = 12.5 \text{ lb/day}$$

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 8

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.5 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Statement of Basis

LA0104647; AI 38078; PER20090001

Page 9

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Sarepta, Sarepta Municipal Wastewater Treatment Facility, February 18, 2009.

Invoice No. _____

Page 1

**LOUISIANA WATER POLLUTION CONTROL FEE SYSTEM
RATING WORKSHEET
PERMIT NO: LA0104647; AI 38078; PER20090001**

1. a. Company Name: Town of Sarepta
b. Facility Name: Sarepta Municipal Wastewater Treatment Facility
2. Local Mailing Address: P.O. Box 338
Sarepta, LA 71071
3. Billing Address (If different):
4. Facility Location: Denmon Rd. off Hwy 2, ½ mile east of Sarepta
a. Parish: Webster Parish
5. Facility Type: publicly owned treatment works
a. Treatment Process Used:
6. Products Produced:
a. Raw materials stored or used:
b. By-products produced:
7. Primary SIC Code: 4952
a. Other SIC Codes:
8. Fac. Manager: Allen Timmons
a. Telephone: (318) 453-2675
9. Owner:
a. Telephone:
10. Env. Contact:
a. Telephone:

11. State Permit No.: LA0104647	12. NPDES Permit No.
a. Date Issued:	a. Effective Date:
b. New: Modified:	b. Expiration Date:

13. Number and Identification of Outfalls: One, 001
14. Number of Injection Wells:
15. Water Source(s):
16. Receiving Water(s): Howell Creek, thence into Bayou Dorcheat
- Is receiving water:
- a. Public Water Supply Yes () No (X)
- b. Designated Water Quality Limited Yes () No (X)
- c. In Compliance with Water Quality Standards Yes () No (X)

17. River Basin: Red River 18. Basin Segment No. 100501

Federal Tax I. D. No.:

Initials of Rater: ed

TOTAL RATING POINTS ASSIGNED 5.3